

AVIATION

JULY 3, 1922

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VOLUME XIII

Number 1

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THE BLERIOT SPAD FOUR-ENGINE AIRLINER
GREATER SAFETY FOR AIR TRAVELLER
THE TWO-WAY AIRPLANE

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225 FOURTH AVENUE, NEW YORK

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AVIATION

VOL. XIII. NO. 1

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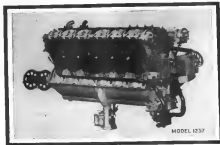
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MANAGING EDITOR

Vol. XXII

AVIATION

JULY 5, 1922

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MANAGING EDITOR

No. 1

Regulating the World's Airways

TREATIES, conventions and like agreements drawn up between nations are, as a rule, cumbersome documents which require a considerable amount of time before they actually become binding. The Convention for the Regulation of Air Navigation of 1919, which was drawn up during the Versailles peace conference and signed by twenty-seven Allied and associated powers, including the United States, did not escape this rule, for to date only fourteen of the signatory states, counting as such the British dominions and India, have ratified the convention. This number, however, makes the convention operative in that it permits of the institution of the International Commission of Air Navigation provided for in the convention.

This permanent commission, which is placed under the direction of the League of Nations, is entrusted with the work of modifying and enlarging the provisions of the convention in the light of practical operation as well as of carrying out various other duties imposed upon it. These "other duties" consist mainly in keeping a record of registered aircraft, of airports of entry and exit, and of restricted areas, establishing standards for aeronautical certificates and making proposals to be carried out hereafter, collecting and disseminating statistical and meteorological information; and securing the publication of standard aeronautical maps.

It will be seen from this incomplete examination that the duties of the International Commission will not only be manifold, and thus necessitate a considerable expense, but also that by the very nature of the work to be done this can be carried out to the best interest of the largest number of "airfaring" countries only by international agreement. There is nothing in the past experience of the League race to approach the speed with which aircraft can otherwise function; hence their movements must necessarily be regulated by worldwide consent.

The importance of the United States, whether considered from the viewpoint of its population and area, or its wealth and economical resources, makes it imperative that we co-operate in this work of making the airways of the world safe for aviation. The state of splendid isolation which the Atlantic and the Pacific afford us is being daily lessened by the increasing development of aircraft. It follows that we cannot afford to remain outside the net of aerial communication which is gradually extending us.

With regard to the United States the International Air Convention has so far remained a dead letter, for so reluctance has as yet occurred, apparently because the convention is linked up with the League of Nations. If the House of Representatives would pass the Watersworth Bill instead of letting it peacefully shelve in the Committee on Interstate Commerce, it may perhaps be hoped that the Department of Commerce, in which this bill would create a Bureau of Civil

Aeronautics, would take an active interest in our foreign air relations. At the present time the latter subject does not concern, strictly speaking, any government office, save perhaps the State Department, and the latter is certainly not equipped to treat this subject with competence. The War Department and the Navy Department, on the other hand, are only indirectly concerned with this matter since it deals with real air transport. All of which surely shows the great evil of having the aeronautical activities of the nation distributed among a score of government bureaus.

The Schneider Cup Race

ANNOUNCEMENT of the outcome in the forthcoming race for the Jacques Schneider Machine Aviation Cup decision, what we had reason to fear for some time, that American aviation will remain unrepresented in this classic seaplane race.

Some six months ago we called attention to the importance of this event and urged American seaplane manufacturers to enter at least one machine in the Schneider Cup race. We said among other things that this would probably be the last chance American manufacturers would have for bringing the famous trophy to the United States. Italy has won for the first time in six months, and if it should again win it this year Italy will become the permanent holder of the trophy.

The two victories of Italian seaplanes in the past Schneider Cup race have naturally helped in making the names of Savoia and Marchi known in other "airfaring" countries, and have also been instrumental in obtaining for these firms numerous orders from various governments and navy companies. Indeed, seaplanes of these makes can now be found in the Iberian peninsula as well as in the Baltic and Scandinavian countries, in Switzerland—where they were unknown before—and also in countries which have seaplane manufacturers of their own. This surely shows, what we have so often maintained here, that aeronautical competition, particularly when they are international in scope, have a distinct sales value through the large amount of publicity such events receive from the daily as well as from the trade press.

Hence we can but regret America's non-participation in the Schneider Cup race, and in particular the fact that the Navy did not take any initiative in this respect. The opportunity spent displayed by the Navy in having entries in the last Farbank race and in the National Air Races, and the Navy's natural concern with seaplanes rather than with land aircraft made us hope to the last that America would not be absent at the coming Schneider Cup race. This not being the case, unfortunately, we can only hope that some other country than Italy may win the Schneider Cup race this year, so that this famous trophy may still remain open for competition.

Elias-Stupar ES1 Commercial Airplane

**Twin-Engine Tractor Biplane, Seating Five Persons
Built to Meet Requirements of Commercial Operation**



The Airbus-Aerobus Model E75 commercial airplane, assigned with 100 000 kg. Le Mans airport

G. Kline & Co., Inc., of Buffalo, N. Y., on May 17 were awarded a War Department contract for two experimental machines of their design for a Type 15 Bomber, which was procured by the department as the best plans submitted for the type specified. The Kline company have received one and a half awards for their designs for the Type 15 Bomber. For three machines of their design for Air Service training planes; Navy No. 30, 1920—\$4,500 prize for the best three-center multi-engine machine, Jan. 28, 1921—second prize for a shipboard plane, \$15,000 by the Navy Department, Aug. 4, 1921—\$10,000 awarded for two-center night demonstrator.

Aside from these activities, G. Klein & Bire has produced for the commercial market the Sigma-Pump K501 airplane, which is fitted with five seats, including that of the pilot. It is designed to meet all requirements for commercial work, and the cost of operation is estimated to be 3.2 cents per pound load every 100 miles. It needs a passenger role, with baggage, or 5 cents a passenger mile without baggage. Its cruising range with full load is 400 miles. There are 44 cu. ft. of storage space with 24 cu. ft. additional if necessary.

The following are approximate figures of cost of carrying cargo per 100 miles, based on an assumed distance of 300 miles between terminals.

Fuel and oil	2.00
Pilot	2.50
Upkeep (mechanics, spare parts, etc.)	13.00
Overhead (rental of field, telephone, office assistants, etc. based on a route where five mechanics are in use)	8.00
Depreciation and insurance	2.50
Cost of transporting 1000 lb. 100 miles	32.00
Cost, net, unpaid, per 1000 miles	\$47.00

RECOVERIES OF THE KASHUTKA BY AIRPLANE

	mean	sd	min	max
Weight	70.8	16.9	44.0	100.0
Height	170.0	7.0	155.0	185.0
Maximum heart rate	170.0	10.0	150.0	185.0

Introducing the Two-Way Airplane

By John H. Flowers

Aeromedical Engineer, U. S. Naval Academy, Port Henry

The idea of a "two-way airplane" proposed by Mr. Flowers, while wholly speculative, embodies a number of interesting points which seem to warrant its publication, if for no other reason than to stimulate thought along these lines. It should be noted that Mr. Flowers does not claim the design to be more than tentative, or may also be seen from the comparative picture of a dual-control flying boat shown in this connection, which was obtained by plain popular comparison.

A criticism of the idea of a "two-way airplane" by a well-known aeronautical expert, is appended to Mr. Flewett's Communication.—*Edison.*

There has long been a demand for a plane which could start and stop in a short distance. Many landing fields are short and narrow, which has caused perhaps more fatalities, due to planes striking obstructions, than any other cause. The

in clutch with the engine. The engine speed is raised to full speed immediately, and the airplane suddenly resumes its direction without turning around.

Landing is a short distance is accomplished by reducing the speed of the engine, throwing the forward propeller out of clutch with the engine, and the rear propeller in clutch with the engine. The full thrust of the rear propeller stops the airplane in an extremely short distance.

The accompanying illustration shows the idea adapted to a sculpture. It is obvious that the same ideas are even more useful on a hard plane.

The main advantage of this idea is that the plane can be stopped in an extremely short distance by throwing in the rear propeller and opening up the engine. It is believed that the astern of a rear propeller pulling backward to stop the plane would be less apt to turn the plane over than the rear



An imaginative picture of what the "Swingway airplane" idea might look like adapted to a flying boat of standard construction.

same problem arises in landing on a ship where the space for starting and landing is very limited.

The two-way airplane was designed to overcome these difficulties. It is an adaptation of the present form of airplane. From observation of the photograph, it will be noticed that the wings have a trailing edge which has the same thickness as the leading edge. The plane has one Liberty engine of 400 hp. which is connected by struts to a right handed propeller at one end of the engine nacelle, and is a left handed propeller at the other end. When it is desired to go forward, the two propellers are turned in such a manner as to make the engine go backward, the stern propeller is connected by the struts to the engine, by a two-way hand lever.

The two-way airplane can be started with either end forward. The forward propeller is thrown on to the engine by means of a clutch, the engine is then started in the usual way by either a hand or self-starter, and the flight started. Suppose it becomes necessary to back out of an encounter with the enemy. The airplane is pointed slightly upward, the engine is shut down to slow speed, the forward propeller thrown out of clutch with the engine, and the rear propeller thrown

of a reversible propeller is facet of the plane. In this way the extra propeller is superior to the use of a reversible screw.

For new maneuvers in the air, this plane would be useful. The flying back and forth on the air without turning the plane around, the quick stop and start, all would be novel and exhilarating. The aviator would fly forward, shift switches, turn around on his second stage, and come flying back in the same path. It could also be used for stunts and show purposes where peculiar flying is desired.

For police work around city harbors where after coming up to the deck it is desired to go out immediately again after harbor thieves without delay in turning around, it would be ideal.

The drag of the extra propeller would be very little so it would rotate like on half boats when not distributed in on the engine and its resistance would not be greater than that of a steam land craft. Dual controls would be necessary, but many planes now have at least the equivalent of part dual control. The reversal of speed would be accomplished in several times the time that the usual efforts of a stall would not be noticeable.

Criticism of the Idea

The following comment on the "way-way" airplane" also has been received by AVIATION from a well known aeronautical engineer:

"So far as quick stopping is concerned, the proposition would appear to be more simply solved by the reversible propeller. The shifting of blades at a critical point in flight, with only a few seconds to work in, would require very quick action, or an automatic shift, rather difficult of realization.

It would further appear necessary to lock the front ladder automatically at the same time the reversible took place, an otherwise difficulty might be expected with controls.

"There would be further difficulty with the shift of the center of pressure. It is hardly to be expected that it will remain in the same position as reversed outside unless the stabilizer setting permits of the center of gravity being on or at the center of the chord. It would further appear doubtful for the pilot to sit on a swivel chair so that he could turn around and face the new direction. This means dual controls.

Another interesting point is that the plane has to pass through air speed at which time it would probably meet with the usual consequences of a stall, although the time of transition might be small enough to greatly reduce the usual effects.

"Altogether, as far as improving the airplane merely as mentioned, it appears to me the reversible propeller would produce equally as good results without involving the risk, plenty I believe is attempting to work out Mr. Parsons' idea."

Aviation in Congress

April 12, 1932 — June 2, 1932

April 22 House
Mr. Bacon discusses the Navy Bill (H.R. 13228) before the battleship is dead and has been supplanted by the airplane. He believes that the nation that controls the air controls the sea and the nation that controls the sea, controls the world.

May 2 House
Mr. O'Connell: A bill (H.R. 13153) providing for the purchase of certain aeroplanes, dirigibles, and methods of aircraft, aircraft parts, and aviation facilities of Science Service Nautic of New York, to the Committee on Appropriations.

May 8 House
Conference report of the Post Office Bill (H.R. 9251) introduced. Its introduction No. 46, \$1,000,000 is provided for air mail service.

May 9 House
Bread Bill with the Department of Justice by the

May 12 House
Post Office Bill (H.R. 9251) Appropriation of \$1,000,000 for air mail passed House.

May 15 House
Discussion of aircraft contracts in the consideration of H.R. 13165 a bill providing appropriation for the purchase of new contracts.

May 17 Senate
The Vice President laid before the Senate a communication from the Secretary of War, transmitting in response to S. Res. 200 information relative to a school of aeronautics, which was referred to the Committee of Military Affairs.

May 18 House
Mr. Hicks on H.R. 13124, a bill authorizing the President to accept certain vessels in conformity with the provisions of the Free Power Navy Treaty upon the conveying of two battle cruisers into American waters.

May 20 House
Mr. Jeffries of Nebraska: a bill (H.R. 13731) to authorize and provide for payment of amounts expended in construction of houses and improvements of flying fields for use in the Air Mail Service of the Post Office Department, to the Committee on Post Office and Post Roads.

May 27 House
Mr. Hinkle's amendment consent to lay on the table H.R. 5219, a bill to create a Bureau of Aeronautics in the Department of the Navy, and the bill H.R. 6207 authorizing the construction of an airplane carrier for the Navy of the United States.

May 28 Senate
Vice President laid before the Senate a communication from the Acting Secretary of the Navy, transmitting in further response to Senate Resolution 200, agreed to April 5, 1932, information relative to the establishment of an academy of aeronautics at the Naval Academy and the memorandum of aircraft at naval stations, etc. which was referred to the Committee on Naval Affairs and ordered to be printed.

June 2 Senate
Senate War Department appropriations (H.R. 10871) Aircraft appropriations, amendedly agreed to. Amendment allowing \$100,000 for balloon experimentation reduced to \$300,000 and agreed to.

—Associated Chamber of Commerce

Greater Safety for Air Travellers

Voluntary Adoption by Airways of Radio or Carrier Pigeons Would be a Desirable Step

Preventing the enactment of Federal legislation for the regulation of air navigation by the National Advisory Committee for Aeronautics in a resolution adopted May 26, 1932, only upon the question of aircraft liability to equip their aircraft to promote the safety and comfort of passengers. It is the committee's opinion that the offering and use of life-saving devices, such as the carrying of radio or water can is all probably be covered by making use of existing knowledge.

The principal Navy left is at Anacostia, D. C., where about 300 birds are kept in training. This is the principal breeding loft of the Navy and is kept in spirit and space as the holder of a sample. The Navy also has pigeon lofts at San Diego, Calif., Fort Harker, Ill. T. Ouse and Porto Rico and other points.

The pigeons are the best in the country, trainers of the Navy's feathered messengers said, pointing out that no Navy bird



Fig. 1. "Bonplane," one of the Navy's best carrier pigeons—Fig. 2. The worn round pigeon breeding loft, at Anacostia, D. C.—Fig. 3. How a pigeon is released from a supplane

and facilities. To this end the committee urges "that large airplanes should be provided with wireless and other signaling equipment, be equipped with a searchlight, and carry at all times fire extinguishers, life preservers, a first-aid kit, and a supply of food and fresh water; that airplanes operating over the land should carry wireless or other signaling apparatus, fire extinguishers, and a first-aid kit."

It is understood that the accident to the "Miss Miami" in which four persons lost their lives, for want of reasonable provisions to provide for the safety of air travelers, prompted this action by the National Advisory Committee for Aeronautics. Legislation for the regulation of air navigation is now pending in Congress.

A Timely Suggestion

The Bureau of Aeronautics, Navy Department, on the other hand, urges that all passenger-carrying airplanes be equipped with radio, or, if that is not feasible, that they carry on board messenger pigeons, the expense of which is limited.

Passenger-carrying airplanes are a public utility and as such should be required by law to possess means of communication for the protection of their passengers in case of emergency. Pigeons are very reliable in this respect, where radio is used or not. In the Naval Air Service every aircraft, before it takes off for a flight, no matter how short a distance, must carry four homing pigeons.

In its aerial messenger service the Navy has about 2000 homing pigeons distributed through the country at all Naval Air Stations, and trained to the homing, in other words, ac-

has ever been beaten in a poultry show in its class, and that many flying records, including the average speed record for young birds are held by the Navy's fowls.

Among the instances where a pigeon has been instrumental in warning and for disabled airplanes, in the case of a plane downed down off the New Jersey coast several months ago. A pigeon from Cape May station released by Eugene French from his plane, when about 85 miles from Atlantic City, notified the station of his predicament and aid was dispatched in time. There are numerous instances of this sort as well as especially at the Pensacola and Anacostia stations. Sometimes it is only a spare part that is called for in the message on the bird's leg and so that even a retired plane carries the part of one to the place in distress.

Pigeons on All Aircraft Carrying Ships

Today the Navy is introducing pigeons on all its aircraft-carrying ships, a first never before successfully attempted by any nation, due to the difficulty in locating the pigeon to a landing hook. This is now being done on the aircraft tenders. Anacostia is keeping a quota of 75 young birds for the airplane carrier Langley and expects to deliver them to the ship at Hampton Roads within the month. A live hook is being issued for the aircraft tender Wright.

Naval pigeon from the Anacostia loft have been used in conjunction with birds from all Washington Circle in the Washington Conference. Incidentally Navy's experiments have been very recent as competitive tests race pilots from 100 to 500 miles out of Washington.

British Racing Airplane Fitted with Air-Cooled Engine



British racing monoplane, fitted with a 200 hp. Bristol "Lionel" 3-cyl. radial air-cooled engine, which won the Whitehead Handicap at the recent Croftley flying meet



Official Photo. G. A. Vary
The personnel of the Aviation Mechanics School, U. S. Navy, at Great Lakes, Ill.

Wright Aeronautical Corp. Wisconsin Air Service Officers—The Wright Aeronautical Corp. of Patuxent, N. J., through John R. Cantley of the Sales Department, has extended an invitation to all Regular Army Air Service officers, including reserve officers, to visit that city and inspect their factory. Mr. Cantley states that if such officers who may desire to visit the plant will give the Sales Department (Telephone Lanchet 6445) sufficient notice in advance of their coming they will be well taken care of.

In the case of Air Service reserve officers, the Wright Aeronautical Corp. has adopted the same policy as in identification as have been promulgated by the Army Air Service with respect to such officers presenting themselves at Air Service flying fields for the purpose of taking flights. The corporation prefers, however, that reserve officers who are really interested in engines from a military point of view, make their arrangements for visiting the plant through the Commanding Officer of their proper Corps Area, and that they be accompanied to the plant by an Air Service officer of the regular establishment on active duty.

Kelly Field—Major Leo G. Hoffmann, Commanding Officer of the 3rd Group (AT&T) stationed at Kelly Field, Tex., recently made a cross-country flight to El Paso, Tex., which turned out to be a rather rough ride before the conference. The first start, in the Major's own ship, resulted in a forced landing near Snyder, Tex., about thirty minutes out. The ship was damaged to such an extent that the return was made by train and the ship brought in by trucks from the 13th Squadron.

The Major again took off in a 20th Squadron ship, with Sergeant Turner as passenger and a companion was lost from the ship. Later the companion failed and the remainder of the journey was flown by land mail. On the DRIVE trip across hill, rate and wind stream was considered at various stages of the journey. The ball was so large and there was such evidence that Major Hoffmann's face was cleared and out quickly.

Chambers Field—Flying training is nearing completion at Chambers Field, Anacostia, Fla., and the present class of officers and flying students will soon be graduated. This class of Jan. 1 will be the last class to receive primary training in Florida. Out of a class of seventy-one, there have been graduated (Hoffmanns); twenty-one have been designated by the faculty board, twenty-nine have completed flying training and twenty-seven are still under instruction. Time twenty-seven will complete their training within the next few weeks.

Chambers Field—The Air Service Mechanics School at Chambers Field, Anacostia, Ill., was visited on May 29 by a delegation of officers from Cook County, Ill., headed by Mack Sparks of Madison. The delegation assembled at Madison, which is 70 miles south of Kansas, and proceeded to that place by automobile. They arrived at the Chambers Field Club at Kansas where they were passed by a number of Kansas business men, and were met by a reception committee from Chambers Field, consisting of Maj. F. L. Martin and Lt. Leno. Frank M. Paul, James Flannery and Russell E. Fox, who conducted them to the field. Upon their arrival, the delegation, which numbered 120 people, were divided into small parties under the direction of an officer, noncommissioned officer or civilian instructor, and were marched on a tour through the field. Dinner was served at 1:30 p. m. at the Consolidated News Hall.

A flying program was given by the pilots of the field at 2:00 p. m. consisting of the following maneuvers: parade of all types of airplanes on the field. Each machine was turned past the parade and an characteristic explained before it took the air. There were six different types of planes represented in this parade: Fokker, S.E.S., Thomas Moore M-20, Spah 23, DH-4 and Curtiss 2500H. The planes circled the field several times, coming down low as they passed the parade.

The next event was a race around the flying field between all types of ships. The M-20 finished in 1:20 (1:20 in length) and landed in time for the pilot, Lt. David Warren B. Carter, to make a quiet appearance before the other states came landing in.

A landing exhibition was next given, in which two DH-4s, piloted by Lt. Lando R. Fox and A. G. Hamilton, landed on imaginary clouds of foam. The column was then straddled by a ground attack airplane, piloted by Lt. Lando R. Fox. The exhibition was then given by the 1st Squadron, 1st Group, 1st Division, 1st Army, 1st Corps, for Amateurs, as general. Much disorder was caused among the troops.

The final event was the seven-day formation of DH-4s which was attended by guests, flown by Lt. Lando R. Fox, 1st Squadron, 1st Group, 1st Division, 1st Army, 1st Corps, for Amateurs, as general. Much disorder was caused among the troops. The final event was the seven-day formation of DH-4s which was attended by guests, flown by Lt. Lando R. Fox, 1st Squadron, 1st Group, 1st Division, 1st Army, 1st Corps, for Amateurs, as general. Much disorder was caused among the troops.

At the present time there are 550 students undergoing the various courses of instruction at the Air Service Mechanics School at Chambers Field. This leaves an approximate number of 110 men awaiting instruction. These men will be entered within six weeks.

Pay for Flying Duty—Among the questions that will probably have to go to the committee present on the determination of the effect of the doubtful provisions in the new pay legislation will be that concerning the phenomenon of certain 20 of the set providing "that all officers, warrant officers and enlisted men of the Army, Navy, Marine Corps, Coast Guard and Coast Guard, when detailed to duty involving flying, shall receive the same increase of their pay" etc., as are now authorized "for the performance of like duties in the Army."

The existing law authorizes special aviation pay for those "while on duty requiring regular and frequent participation in aerial flight." The controller general's decision on the law as it now stands have been regarded as somewhat restrictive and severe. The new law applies to those on "flying duty" which constitutes a very broad phrase, but one, nevertheless, that will require a definition, ultimately by the regulating officers. It is also worthy of remark that the existing disposition to limit special aviation pay to those at the air service is extended to include all in the service except who are "detailed to duty involving flying."

This new legislation merits a broader view which aviation have been pressing should be taken in the determination of the special compensation, which legitimately attaches to their class of duty.

Naval Aviation

Senate Increases Naval Air Appropriations—The Senate Committee on Naval Affairs has reported the naval appropriation bill with amendments indirectly increasing the number in the House of Representatives to aviation.

The Senate recommendation contained appropriations for new aircraft and new construction work on hangars. The House refused to allow an enhancement of the naval air service, in spite of the results of the bombing from last summer, which demonstrated the supreme importance of aircraft as an instrument of naval warfare. The Senate bill brings the total for naval aviation up to \$14,703,250, in which is included the \$4,550,000 for the construction of 213 new fleet aircraft.

Regarding the naval aviation increase, the committee said that "the absolute importance of the air service as a branch of naval warfare had been demonstrated." The total naval appropriations were \$14,703,250 and the report said that \$10,000,000 had been appropriated for the Army air service, a total for both of \$24,703,250, as compared with aviation budgets of \$6,024,000 by Great Britain, \$4,600,000 by France and \$18,703,000 by Japan.

On June 21 the House and Senate committees agreed on the inclusion in the Naval Appropriation bill of the Senate recommendation providing \$1,007,000 for new aircraft construction.

Response Needs Naval Air Station—The airport at Great Lakes, during the past week from Ellington Field Air Station, including one ship to Ellington is within the Navy's hand. A test for it is a very easy way. It is noted the fact that the CT lost 518 ft. after being exposed to the sea for twenty minutes. Res. C. E. Beach of the Bureau of Aeronautics and Mr. F. W. Fisher of the Bureau of Standards reported to Ellington Range to not in the CT test.

Twenty-three flights, totaling 12 ft. 30 min. were made during the week, including a flight of a P-1, to Annapolis and the coast. The latter flight made 90 percent flight, and one landing over the water.

Naval Orders—Lieut. William F. Brown, det. U.S.S. Bridgeport, to Curtis Aeroplane and Motor Corp., Garden City, L. I. (inst. aircraft inspection). Lieut. George C. Smith, det. Naval Air Station Pensacola, Fla., to Bureau of Ordnance, Navy Dept., Washington, D. C. Lieut. (jg) James E. Boyer, det. Naval Air Station Pensacola, Fla., to duty Naval Air Station Cox 5th, C. Z.

Lieut. (jg) Walter A. Brooke, S.F., det. Air Squadron, Pacific Fleet, to base. Lieut. (jg) Edmund A. Whitman, C.C., det. Inspector of Naval Aircraft Works, G. Elias & Son, Buffalo, N. Y., to base. Lieut. Allen P. Pledge, det. Naval Air Station Pensacola, Fla., to duty Air Squadron, Atlantic Fleet. Lieut. Robert Paine, det. Naval Air Station Pensacola, Fla., to Naval Air Station Anacostia, D. C. Lieut. James Schmitt, det. Naval Air Station Pensacola, Fla., to duty Air Squadron, Atlantic Fleet. Lieut. (jg) Harvey H. Brown and Stephen E. Hadden, det. Naval Air Station Pensacola, Fla., to duty Air Squadron, Atlantic Fleet. Lieut. (jg) John B. Noble and Oliver E. Short, det. Naval Air Station Pensacola, Fla., to duty Naval Air Station Anacostia, D. C. Lieut. Edmund P. Knight, det. U.S.S. F. Ford Talbot, to duty Naval Air Station Pensacola, Fla. Lieut. Lawrence A. Pope, det. Naval Air Station Pensacola, Fla., to Naval Air Station Anacostia, D. C. Lieut. (jg) Matthew S. Gifford, det. Naval Air Station Pensacola, Fla., to U.S.S. Wright. Lieut. (jg) Van Rensselaer Moore, det. Naval Air Station Pensacola, Fla., to Air Squadron, Atlantic Fleet. Lieut. (jg) H. H. Hadden, det. Naval Air Station Pensacola, Fla., to duty Air Squadron, Atlantic Fleet. Lieut. (jg) John C. Williams, det. Naval Air Station Pensacola, Fla., to Air Squadron, Atlantic Fleet. Lieut. Albert M. Dyer, S.F., to duty Naval Aircraft Factory, Philadelphia, Pa. Res. Strathairn Arber, det. Naval Air Station Pensacola, Fla., to duty Air Squadron, Atlantic Fleet. Lieut. George D. Thompson, (S.C.), det. Naval Hospital Station, L. I., to duty Naval Air Station Pensacola, Fla. Lieut. Grover C. Wilson, (M.C.), det. Naval Hospital Station, L. I., to duty Naval Air Station Pensacola, Fla. Lieut. Robert H. Hall, (S.C.), det. Naval Helium Production Plant, Fort Worth, Tex., to L. I. Harwood Hadden, L. I., to duty Naval Air Station Pensacola, Fla. Lieut. (jg) Edmund Minge, (S.C.), supply and disbursing officer, Naval Helium Production Plant, Fort Worth, Tex.

Coming Aeronautical Events

- Sept. 4 — Detroit Aerial Water Trophy, Detroit. (Curtis Marine Flying Trophy Competition.)
- Sept. 20 — Fox Award, International Championship Meet. (On proposition.)
- Oct. 13-14 — Detroit Aerial Derby, Detroit. (Publicity Trophy Race.)
- FOREIGN
- August — Coupe D'argent Schneider. (Schneider cup.) Naples, Italy.
- August — Tyrkholm Trophy. (International speed competition.) Naples, Italy.
- Aug. 6 — Gordon Bennett Balloon Race, Geneva, Switzerland.
- Aug. 6-8 — Soaring and Gliding Competition, Chateau Farmstead, France.
- Aug. 24-25 — Soaring and Gliding Competition, Gersfeld, Germany.
- September — Grand Prix of Italy. (International all-places competition.) Milan, Italy.
- Sept. 22 — Grand Prix Deutsch de la Meurthe. (All-places speed race.) France.
- American allusionation will, if required, to be held show Aug. 10, at Washfield, L. I.
- October — International Parachute Competition. Rome, Italy.

Foreign News

The Netherlands—The Royal Aerial Navigation Co. of the Netherlands (R.L.M.), has published figures covering its services in 1931. During that year 642,957 kg. of mail, 245,750 kg. of goods, and 169 passengers were carried by the Amsterdam-London line. On the Amsterdam-Brussels-Paris line traffic amounted to 390,263 kg. of mail, 11,141,928 kg. of goods, and 325 passengers. On the Rotterdam-Hamming service 559,240 kg. of mail, 2,037,859 kg. of goods and 254 passengers were carried. These figures show a very significant increase over the 1929 returns, the latter totaling less than 1 per cent of the 1931 traffic in the case of mail and goods and only 21 per cent in the number of passengers.

The daily Amsterdam-London service of the Royal Aerial Navigation Co., discontinued during the winter, was resumed on April 15. A new set of passenger and freight rates, representing an appreciable advance over those of 1929 and 1930, have been put into effect. Passenger rates have been reduced to 75 guilders from the 150 guilders in effect during 1929. In that year the maximum freight charges were 250 and the maximum charge 3.50 guilders per kilo, whereas the present rate is 1.50 guilders for the first kilo, with a rate of 0.90 guilder per kilo for additional kilo and a special rate of 0.90 guilder per kilo on large quantities.

The Netherlands Government has not yet taken any action toward resuming the recently granted the Royal Aerial Navigation Co. in 1931.

Germany—The Regensburg-Luft-Lloyd, a Munich concern, resumed its daily mail and passenger service between Munich and Constantine, on Lake Constantine, on April 3, according to Consul Wm. Dawson at Munich. Flights leave Munich at 2:15 p. m. and arrive at Constantine at 3:45 p. m. Returning the same day, leaving Constantine at 4:30 and arriving at Munich at 5:45. The Regensburg Luft-Lloyd has various types of planes, including Junkers and passenger biplanes and open planes carrying one or two passengers. The single fare to Constantine is 1000 Mks., round trip 1600 Mks. Excursions are also planned to the vicinity of Munich and the Bavarian Alps in closed Junkers planes.

Although the number of airplanes in use was negligible during the past year, seven German companies claim to have covered a total of 3,652,053 km. during the seven months from April to November, 1931, carrying 3,163 passengers and 39,752 kg. of post and parcels. Commercial Aircraft Co. (E. H. Hering, Berlin).

Great Britain—Compulsory use of parachutes on all passenger-carrying aircraft is a decision of the Air Ministry which will shortly be made public. At present the survey companies carry lifeboats for their passengers when crossing the sea, but have been yet thought fit to equip its airships with aerial life boats.

It is pointed out that at least 2000 lives were saved during the war by means of parachutes used with lake balloons only, although no form of transport can ever be free from perilous and constant risk of accident, the possible nature of air travel makes it essential that no possible means of safety should be ignored.

Argentina—It is estimated that there are 275 airplanes in Argentina, of which 55 belong to the army. Of the total number, 89 are French, 30 are American, 54 are British, 4 are Italian, 11 are German and 50 are of various makes. The Compañia Rio Platense de Aviación made 64 trips and carried 294 passengers between Buenos Aires and Montevideo up to March 3. The cost of the round trip between the two cities is 145 pesos, including the airworthy transportation to and from the field. The fare of Montevideo is 40 pesos, in addition to the trip of 50 to be paid when going 40 pesos. (Trade Commissioner George S. Brady, Buenos Aires)

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